Form Tags

1. Purpose of the <form> Tag:

The <form> element is used to collect user input. It can contain various types of input elements, such as text fields, checkboxes, radio buttons, and submit buttons. Forms are essential for user interaction on web pages, allowing for data submission to servers.

2. Basic Structure:

```
html

<form action="submit-url" method="POST">
    <!-- Input elements go here -->
</form>
```

3. Attributes of the <form> Tag:

- 1. **method**: Defines the HTTP method to be used when submitting the form:
 - GET: Appends form data to the URL as a query string (visible in the URL).
 - POST: Sends form data in the body of the request (not visible in the URL, more secure for sensitive data).

1. **action**: Specifies the URL to which the form data will be sent when submitted. If not specified, the form will submit to the current URL.

- 2. **target**: Specifies where to display the response after submitting the form.
 - Values can include:
 - o _self: Default; opens in the same frame.
 - _blank: Opens in a new tab/window.
 - parent: Opens in the parent frame.
 - _top: Opens in the full body of the window.
- 3. **autocomplete**: Controls whether the browser should enable autocomplete on the form. Values can be:
 - on: Enables autocomplete.
 - off: Disables autocomplete.

4. Form Elements:

1. Text Input

- o Tag: <input type="text">
- o **Description:** A single-line input for text.

2. Password Input

- Tag: <input type="password">
- o **Description:** A single-line input for passwords; characters are hidden.

3. Email Input

- o Tag: <input type="email">
- o **Description:** A field for email addresses; provides basic validation.

4. Telephone Input

- o Tag: <input type="tel">
- o **Description:** A field for telephone numbers; allows for numeric input.

5. **URL Input**

- o Tag: <input type="url">
- **Description:** A field for URLs; provides basic validation.

6. Number Input

- o Tag: <input type="number">
- **Description:** A field for numeric input, with controls for incrementing/decrementing values.

7. Range Input

- o Tag: <input type="range">
- o **Description:** A slider for selecting a value within a specified range.

8. Checkbox

- o Tag: <input type="checkbox">
- **Description:** A box that can be checked or unchecked; used for binary choices.

9. Radio Button

- o Tag: <input type="radio">
- **Description:** A button that allows users to select one option from a group.

10. File Upload

- o Tag: <input type="file">
- o **Description:** Allows users to upload files.

11. Date Input

- o Tag: <input type="date">
- o **Description:** A field for selecting dates; provides a date picker.

12. Time Input

- o Tag: <input type="time">
- o **Description:** A field for selecting a time; provides a time picker.

13. Datetime-local Input

- Tag: <input type="datetime-local">
- o **Description:** A field for selecting a date and time.

14. Month Input

- o Tag: <input type="month">
- o **Description:** A field for selecting a month and year.

15. Week Input

- o Tag: <input type="week">
- o **Description:** A field for selecting a week and year.

16. Textarea

- o Tag: <textarea>
- o Description: A multi-line text input field.

17. Select Dropdown

- o Tag: <select>
- o **Description:** A dropdown list for selecting one or more options.

18. Button

- o Tag: <button>
- o **Description:** A clickable button that can trigger actions.

19. Submit Button

- o Tag: <input type="submit"> or <button type="submit">
- o **Description:** A button that submits the form.

20. Reset Button

- Tag: <input type="reset"> or <button type="reset">
- o **Description:** A button that resets the form fields to their default values.

21. Image Button

- Tag: <input type="image">
- **Description:** A submit button that displays an image instead of text.

22. Hidden Input

- o Tag: <input type="hidden">
- Description: A field that is not visible to users but holds data to be submitted with the form.

23. Placeholder

- o Attribute: placeholder
- Description: Provides a short hint that describes the expected value of an input field (e.g., a sample value or a short description). Used in input elements.
- Example: <input type="text" placeholder="Enter your name">

24. Fieldset

- Tag: <fieldset>
- o **Description:** Groups related elements within a form; helps organize the form visually.

25. Legend

- Tag: <legend>
- o **Description:** Provides a caption for a <fieldset> to describe its contents.

26. **Output**

- o Tag: <output>
- **Description:** Represents the result of a calculation or user action.

5. Validation:

HTML5 offers built-in form validation attributes, such as:

required: Specifies that the input field must be filled out.

minlength/maxlength: Defines the minimum and maximum length of input.

pattern: A regular expression that the input must match.

```
<form>
     <label for="password">Password (8-20 characters):</label>
     <input type="password" id="password" name="password" minlength="8" maxlength="20" requ:
     <button type="submit">Submit</button>
</form>
```

project:

Project Management

